 

IN THE SPECIFICATION

Please amend the paragraph beginning on page 13 and continues to page 14 as follows:

The wireless communication device of Figure 2 is one that may be implemented to include either a direct conversion from RF to baseband and baseband to RF or for a conversion by way of a low intermediate frequency. In either implementation, however, for up-conversion module 82 and down-conversion module 70, it ~~(what is "it"?)~~ is required to provide accurate frequency conversion. For the down-conversion module 70 and up-conversion module 82 to accurately mix a signal, however, it is important that the local oscillation module 74 provides an accurate local oscillation signal for mixing with the baseband or RF by the up-conversion module 82 and down-conversion module 70, respectively. Accordingly, the local oscillation module 74 includes circuitry for adjusting an output frequency of a local oscillation signal provided therefrom. As will be explained in greater detail below, the local oscillation module 74 ~~includes a multi-stage (what?) that~~ receives a frequency correction input that it uses to adjust an output local oscillation signal to produce a frequency corrected local oscillation signal output. While one embodiment of the present invention includes local oscillation module 74, up-conversion module 82 and down-conversion module 70 that are implemented to perform direct conversion between baseband and RF, it is understood that the principles herein may also be applied readily to systems that implement an intermediate frequency conversion step at a low intermediate frequency. The present invention may readily be inserted in any one of the various circuit blocks or devices of Figures 1 and 2.

Please amend the paragraph beginning on page 21 and continues to page 22 as follows:

Figure 9 is a flowchart illustrating a method for producing integrated circuit radio frequency transceivers according to one embodiment of the present invention. Initially, the invention includes producing a sample of an integrated circuit radio frequency transceiver forming a plurality of traces on top of a metal layer and forming a shorted resistive block in-line with at least one long trace of a plurality of traces (step 180). The resistive block comprises at least one resistor and, if more than one, each resistor can comprise resistors that are either series coupled or parallel coupled. In the case of series coupled resistors, each resistor includes a short across its terminals. In the case of parallel coupled resistors, one short <u>or trace is operable to </u>short[[s]] out all of the resistors in the resistive block. Thereafter, the invention includes evaluating real performance of the sample of the integrated circuit radio frequency transceiver (step 182). The performance is evaluated and stored for comparison at a later step in the process. Thereafter, unless the performance is within a specified threshold, the invention includes determining whether harmonic interference may need to be reduced (step 184). Assuming that harmonic interference or spurs through the substrate do need to be reduced, the invention includes selecting a first trace of the at least one trace and removing a short across at least one shorted resistor of the resistive block to form an unshorted resistive block (step 186). This unshorted resistive block, along with parasitic capacitance at high operating frequencies, forms an effective RC filter for removing spurs and harmonics. Thereafter, the invention includes producing the integrated circuit radio frequency transceivers with the unshorted resistive block (step 188). Because the resistive blocks are formed on a top metal layer of the integrated circuit, only a top layer mask needs adjusting to modify the design to produce the integrated circuit radio transceivers with the unshorted resistive blocks. In one embodiment of the invention, wherein a plurality of resistors are formed on the top metal layer, the invention may also include evaluating the performance of the sample with the removed short of the unshorted resistive block (step 190). Thus, the invention may also include removing shorts across additional resistors of the first trace. The invention may also include, however, selecting a second trace of the at least one

trace, and removing a short across at least one shorted resistive block of the second block to form an unshorted resistive block of the second trace (step 192). In such a case, the step of producing an integrated circuit radio frequency transceiver includes producing transceivers with unshorted resistive blocks having at least two shorts removed (step 194). One advantageous aspect of the above steps is that forming such traces on a lap layer facilitates using focused ion beam cutting to achieve the desired circuit connectivity in place of re-fabricating a design with a new mask. Thus, speed of response and reduced cost are some of the benefits of the described embodiments of the invention. Moreover, the optimum configuration may be determined prior to committing to expense mask development and finalization.